

Indoor Air Report



MCP Chemicals

A Summary of Typical Indoor Air Concentrations of Various VOCs

**Data from Rago et al 2005 and Rago et al 2005 APH have been corrected to account for % Detection

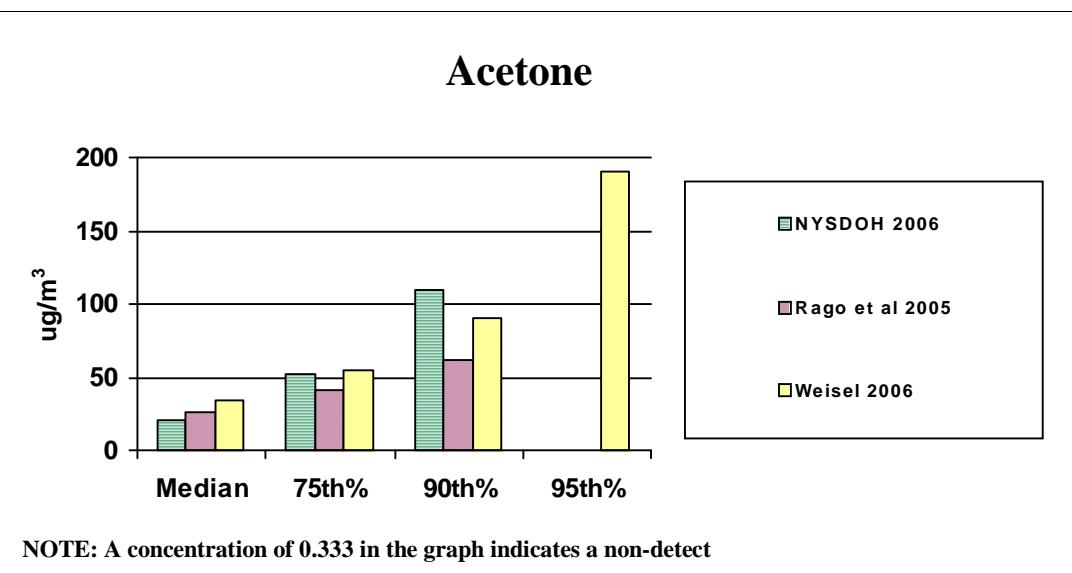
MassDEP Survey of Typical Indoor Air Concentrations

All Concentrations are in ug/m³

Acetone

CAS Number: 67-64-1

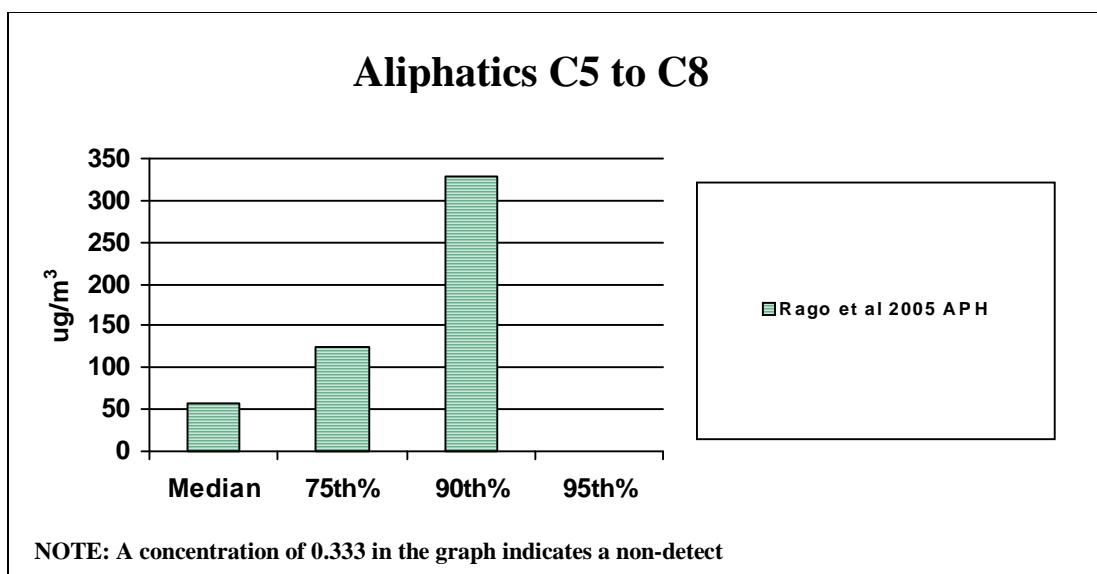
<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	21	52	110		94.7 %	0.25
Rago et al 2005	26.45	41.38	61.59		97 %	4.75
Weisel 2006	34.5	55	91	190	94 %	12
Median (ug/m³)	26.45	52	91	190	94.7 %	



MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Aliphatics C5 to C8**

CAS Number: NA

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Rago et al 2005 APH	57.95	125.25	328.5		83 %	24
Median (ug/m³)	57.95	125.25	328.5		NR	83 %



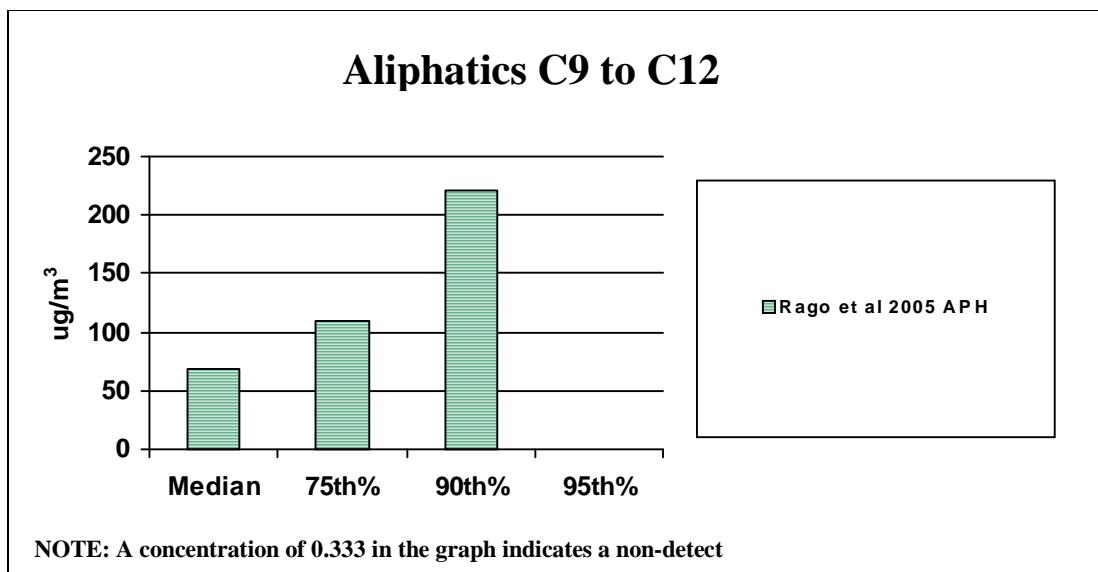
MassDEP Survey of Typical Indoor Air Concentrations

All Concentrations are in ug/m³

Aliphatics C9 to C12

CAS Number: NA

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Rago et al 2005 APH	68.3	110.25	221.7		80 %	28
Median (ug/m³)	68.3	110.25	221.7	NR	80 %	



MassDEP Survey of Typical Indoor Air Concentrations

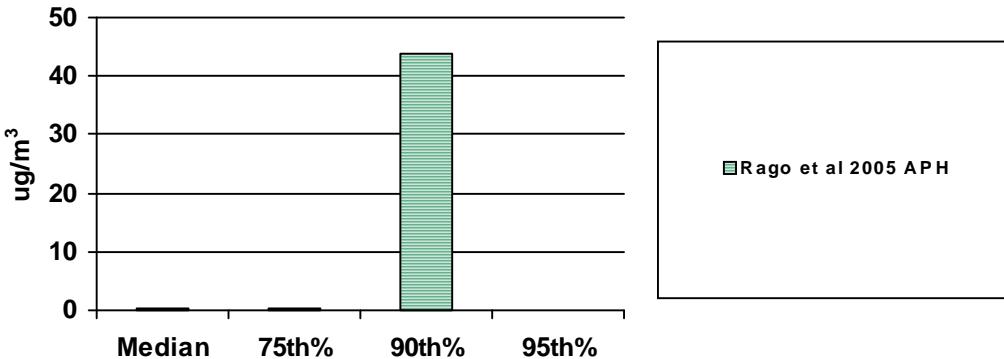
All Concentrations are in ug/m³

Aromatics C9 to C10

CAS Number: NA

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Rago et al 2005 APH	ND	ND	43.88		24 %	24
	Median (ug/m³)	NR	NR	43.88	NR	24 %

Aromatics C9 to C10



■ Rago et al 2005 APH

NOTE: A concentration of 0.333 in the graph indicates a non-detect

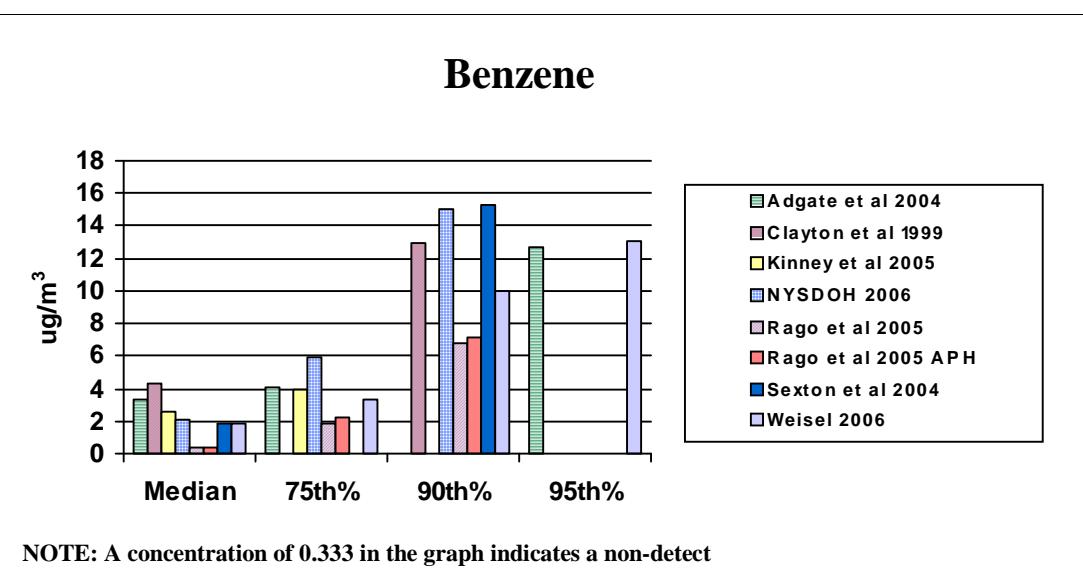
MassDEP Survey of Typical Indoor Air Concentrations

All Concentrations are in ug/m³

Benzene

CAS Number: 71-43-2

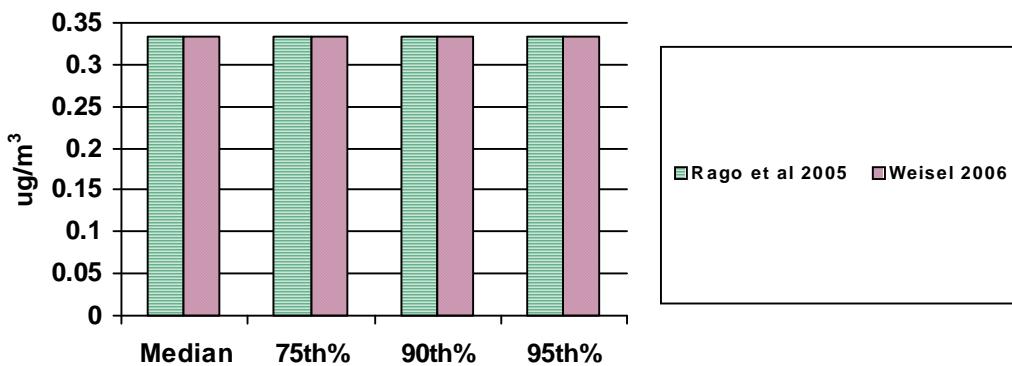
<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Adgate et al 2004	3.3	4.1		12.7	100 %	1.4
Clayton et al 1999	4.35		12.95		99.8 %	
Kinney et al 2005	2.54	3.97			65 %	1.78
NYSDOH 2006	2.1	5.9	15		93 %	0.25
Rago et al 2005	ND	1.91	6.8		31 %	1.6
Rago et al 2005 APH	ND	2.22	7.15		30 %	2
Sexton et al 2004	1.9		15.3		99.7 %	1.4
Weisel 2006	1.8	3.28	10	13.1	76 %	1.6
Median (ug/m³)		2.32	3.625	11.475	12.9	84.5 %



MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Bromodichloromethane**

CAS Number: 75-27-4

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Rago et al 2005	ND	ND	ND	ND	0 %	3.35
Weisel 2006	ND	ND	ND	ND	0 %	3.4
Median (ug/m³)	NR	NR	NR	NR	0 %	

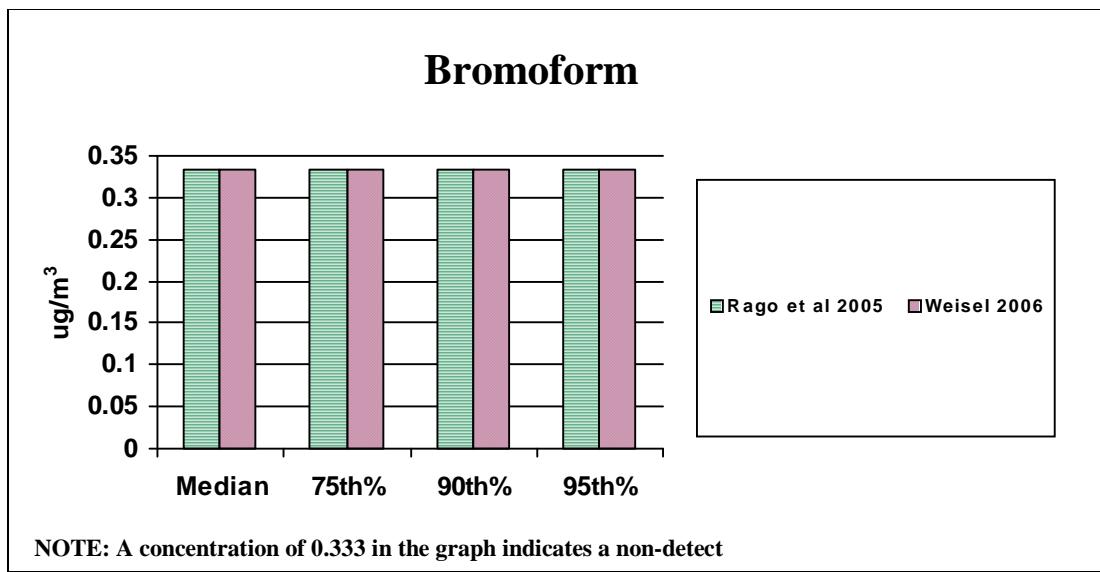
Bromodichloromethane

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Bromoform**

CAS Number: 75-25-2

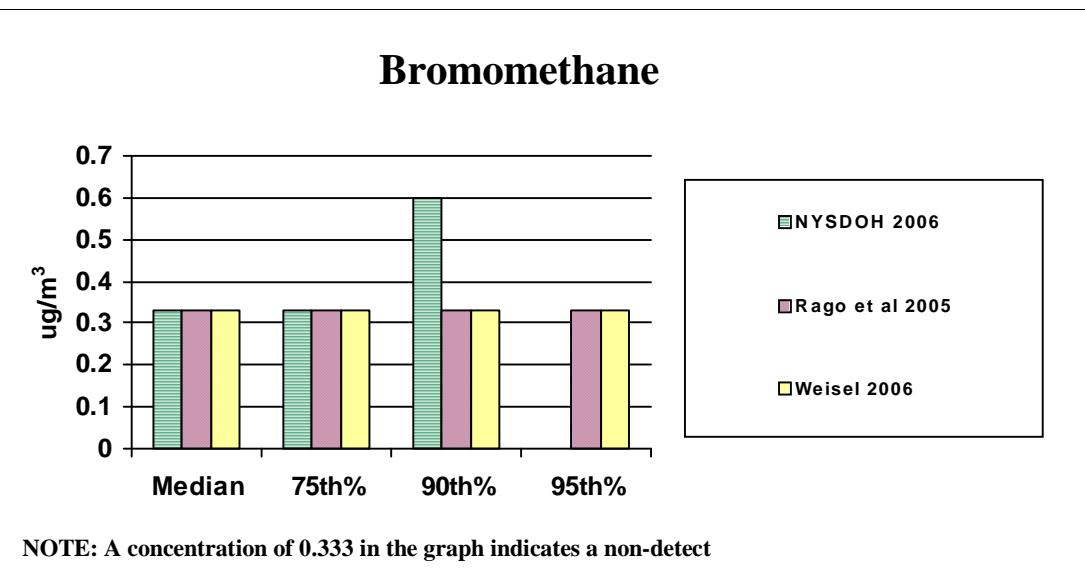
<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Rago et al 2005	ND	ND	ND	ND	0 %	5.16
Weisel 2006	ND	ND	ND	ND	0 %	5.2
Median (ug/m³)	NR	NR	NR	NR	0 %	



MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Bromomethane**

CAS Number: 74-83-9

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	0.6		23 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	1.94
Weisel 2006	ND	ND	ND	ND	0 %	1.9
Median (ug/m³)	NR	NR	0.6	NR	0 %	

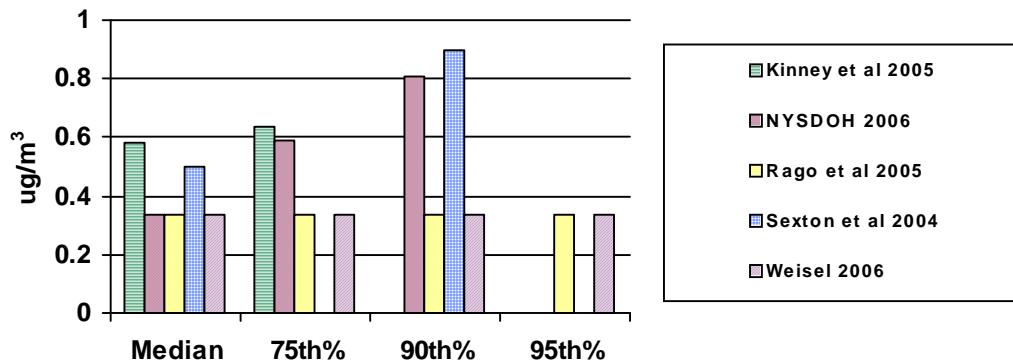


MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Carbon tetrachloride**

CAS Number: 56-23-5

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Kinney et al 2005	0.58	0.64			93 %	0.1
NYSDOH 2006	ND	0.59	0.81		49.7 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	3.14
Sexton et al 2004	0.5		0.9		99.7 %	1.2
Weisel 2006	ND	ND	ND	ND	0 %	3.1
Median (ug/m³)	0.54	0.615	0.855	NR	49.7 %	

Carbon tetrachloride

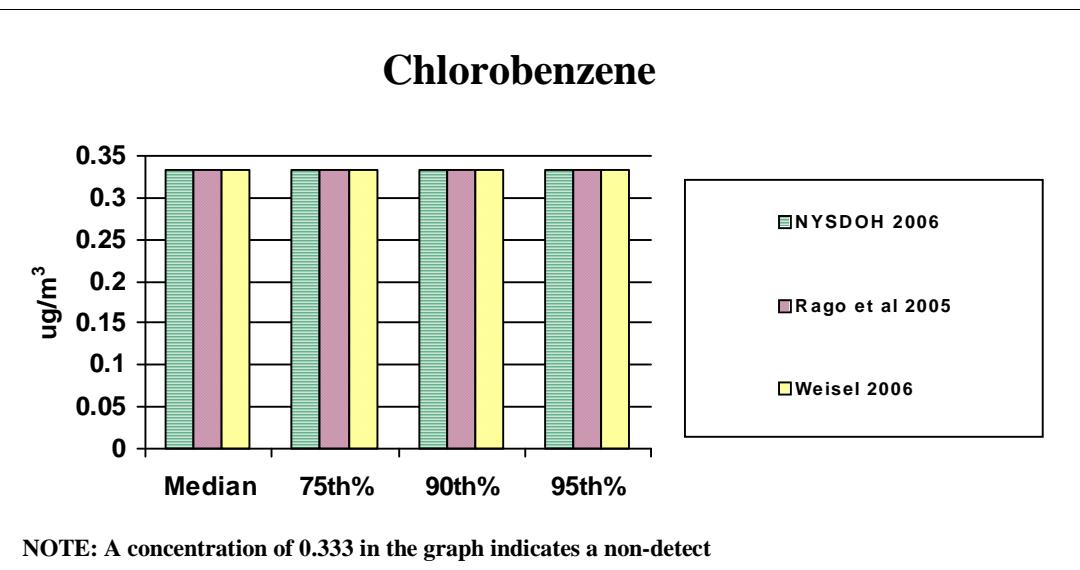


NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Chlorobenzene**

CAS Number: 108-90-7

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	ND	ND	0.5 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	2.3
Weisel 2006	ND	ND	ND	ND	0 %	2.3
Median (ug/m³)	NR	NR	NR	NR	0 %	

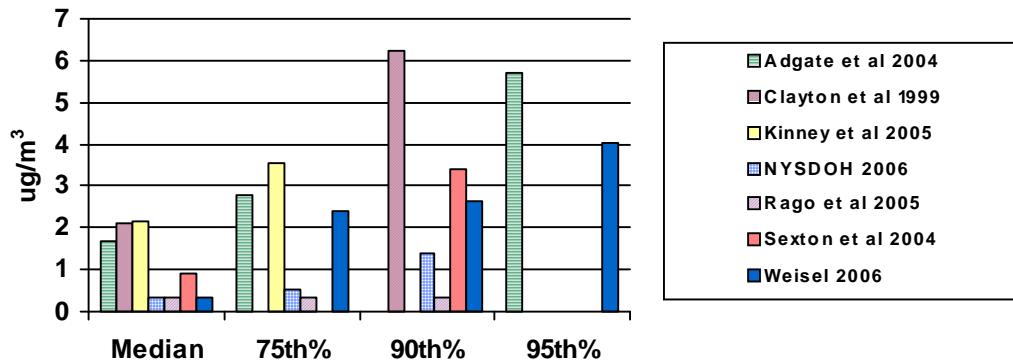


MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Chloroform**

CAS Number: 67-66-3

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Adgate et al 2004	1.7	2.8		5.7	98.6 %	0.4
Clayton et al 1999	2.13		6.24		72.8 %	
Kinney et al 2005	2.15	3.54			92 %	0.12
NYSDOH 2006	ND	0.54	1.4		47 %	0.25
Rago et al 2005	ND	ND	ND		9 %	2.44
Sexton et al 2004	0.9		3.4		75.3 %	0.6
Weisel 2006	ND	2.4	2.62	4.05	29 %	2.4
Median (ug/m³)		1.915	2.6	3.01	4.875	72.8 %

Chloroform

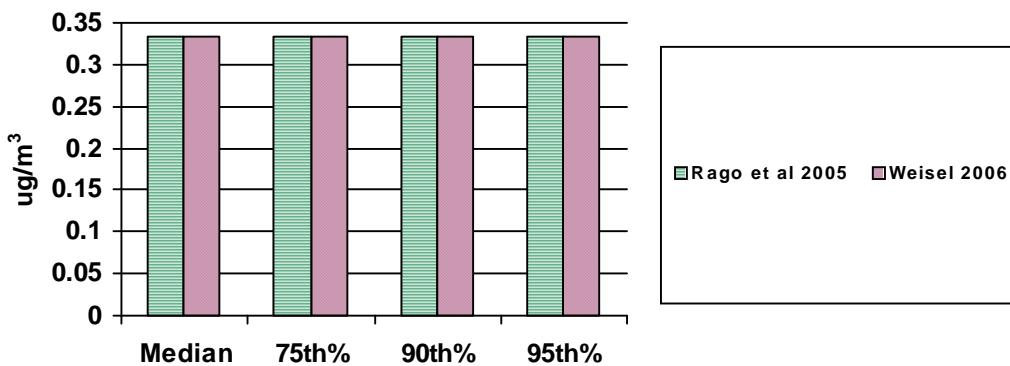


NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Dibromochloromethane**

CAS Number: 124-48-1

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Rago et al 2005	ND	ND	ND	ND	0 %	4.26
Weisel 2006	ND	ND	ND	ND	0 %	4.3
Median (ug/m³)	NR	NR	NR	NR	0 %	

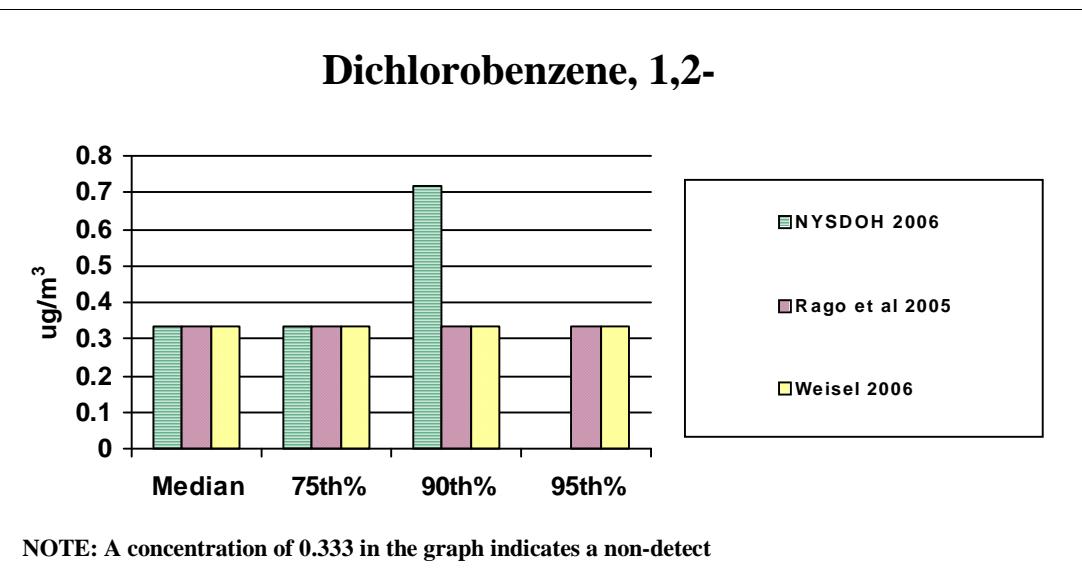
Dibromochloromethane

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Dichlorobenzene, 1,2-**

CAS Number: 95-50-1

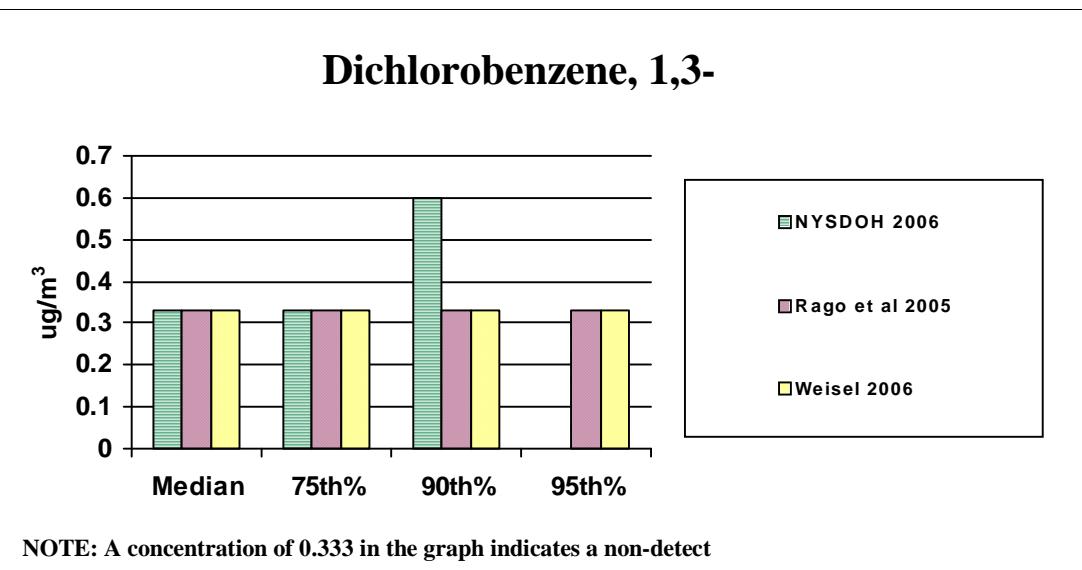
<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	0.72		21.2 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	3
Weisel 2006	ND	ND	ND	ND	1 %	3
	Median (ug/m³)	NR	NR	0.72	NR	1 %



MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Dichlorobenzene, 1,3-**

CAS Number: 541-73-1

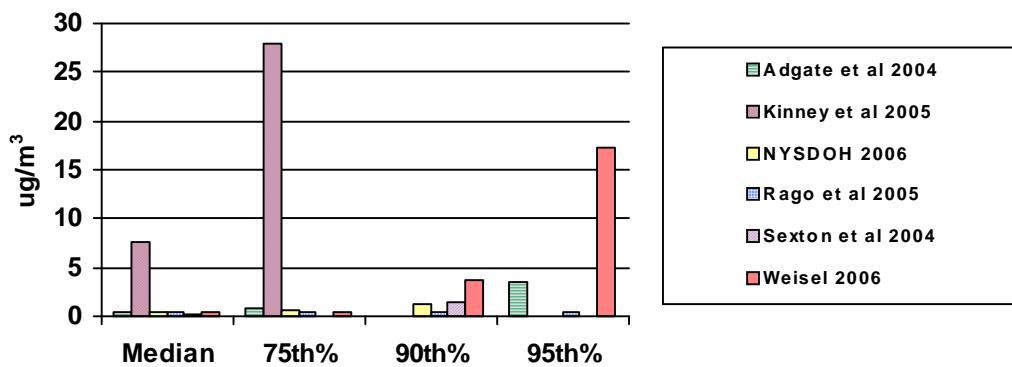
<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	0.6		21 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	3
Weisel 2006	ND	ND	ND	ND	%	3
	Median (ug/m³)	NR	NR	0.6	NR	10.5 %



MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Dichlorobenzene, 1,4-**

CAS Number: 106-46-7

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Adgate et al 2004	0.5	0.9		3.4	88 %	0.2
Kinney et al 2005	7.54	27.95			93 %	1.61
NYSDOH 2006	ND	0.54	1.3		33.5 %	0.25
Rago et al 2005	ND	ND	ND	ND	3 %	3
Sexton et al 2004	0.2		1.5		72.6 %	4.4
Weisel 2006	ND	ND	3.77	17.2	16 %	3
Median (ug/m³)		0.5	0.9	1.5	10.3	53.05 %

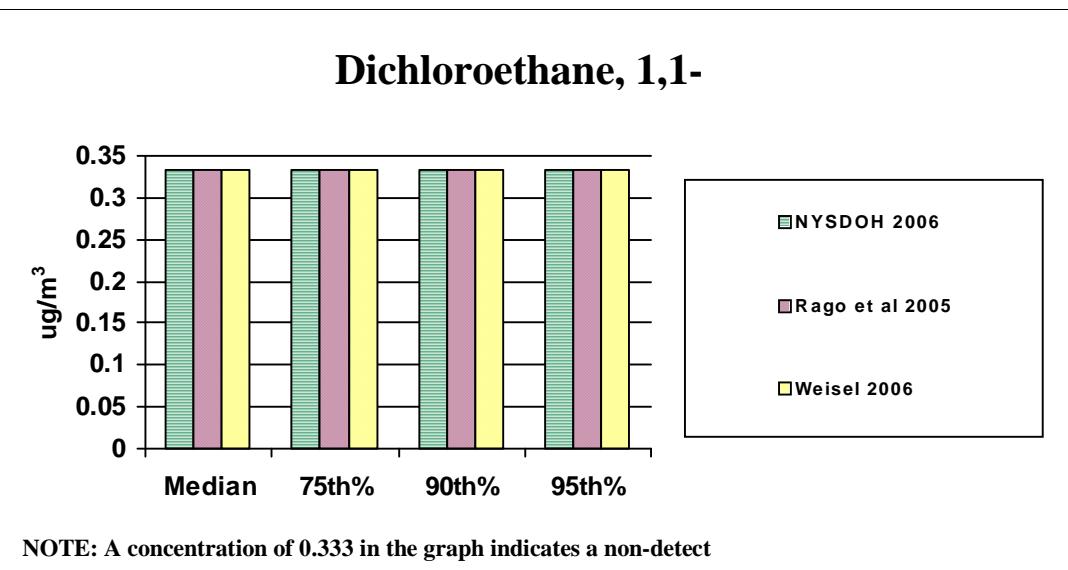
Dichlorobenzene, 1,4-

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Dichloroethane, 1,1-**

CAS Number: 75-34-3

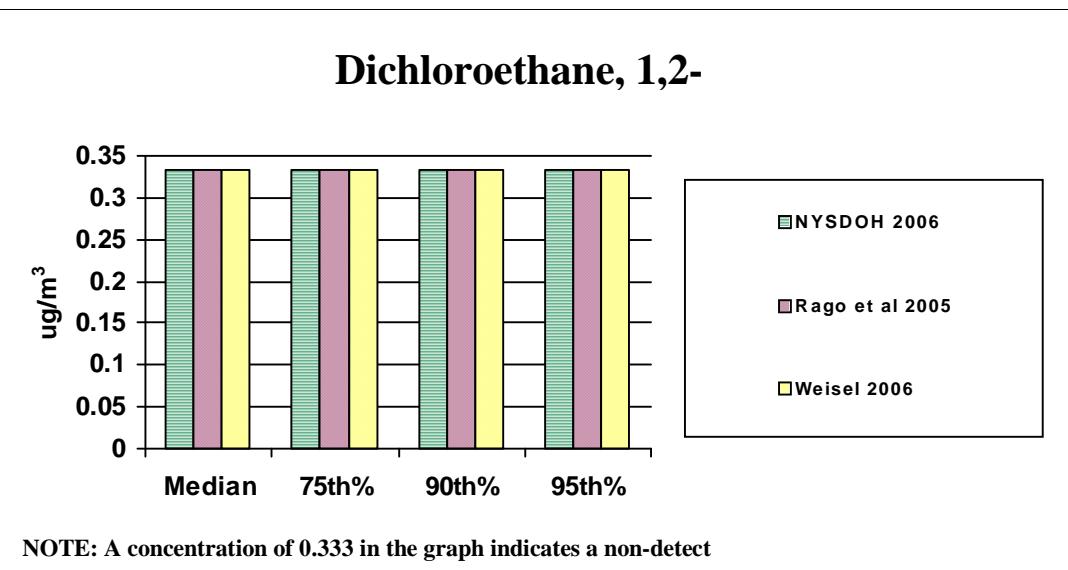
<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	ND	ND	1 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	2.02
Weisel 2006	ND	ND	ND	ND	0 %	2
	Median (ug/m³)	NR	NR	NR	NR	0 %



MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Dichloroethane, 1,2-**

CAS Number: 107-06-2

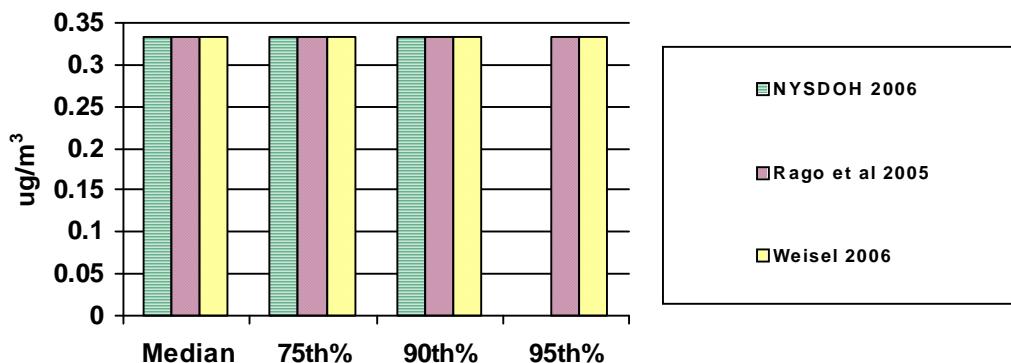
<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	ND	ND	1.5 %	0.25
Rago et al 2005	ND	ND	ND	ND	1 %	2.02
Weisel 2006	ND	ND	ND	ND	1 %	2
	Median (ug/m³)	NR	NR	NR	NR	1 %



MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Dichloroethylene, 1,1-**

CAS Number: 75-35-4

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	ND		6.7 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	1.98
Weisel 2006	ND	ND	ND	ND	0 %	2
	Median (ug/m³)	NR	NR	NR	NR	0 %

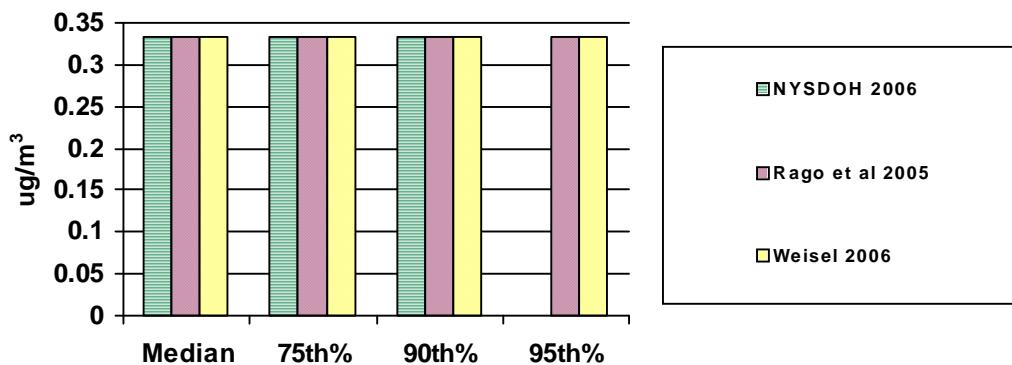
Dichloroethylene, 1,1-

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Dichloroethylene, cis-1,2-**

CAS Number: 156-59-2

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	ND		9 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	1.98
Weisel 2006	ND	ND	ND	ND	1 %	2
	Median (ug/m³)	NR	NR	NR	NR	1 %

Dichloroethylene, cis-1,2-

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air Concentrations

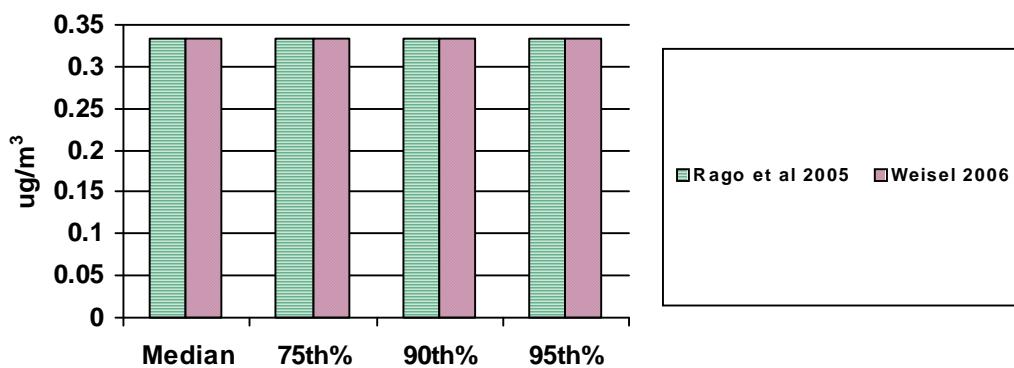
All Concentrations are in ug/m³

Dichloroethylene, trans-1,2-

CAS Number: 156-60-5

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Rago et al 2005	ND	ND	ND	ND	0 %	1.98
Weisel 2006	ND	ND	ND	ND	0 %	2
	Median (ug/m³)	NR	NR	NR	0 %	

Dichloroethylene, trans-1,2-

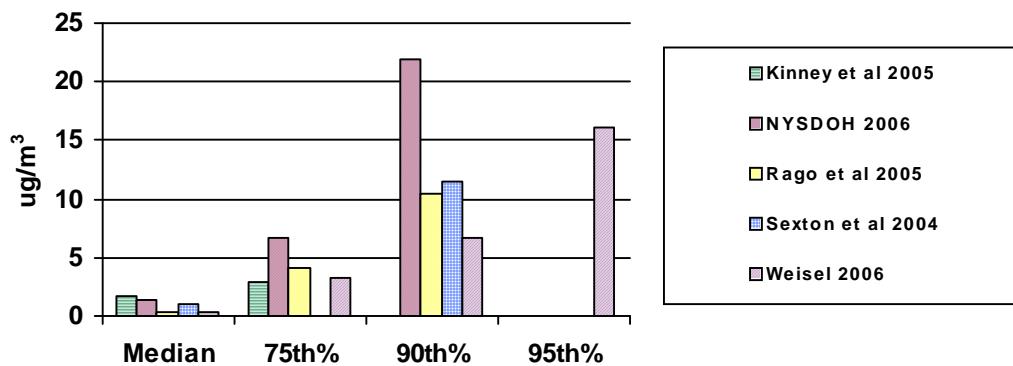


NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Dichloromethane**

CAS Number: 75-09-2

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Kinney et al 2005	1.76	2.92			50 %	1.04
NYSDOH 2006	1.4	6.6	22		77.7 %	0.25
Rago et al 2005	ND	4.17	10.53		29 %	3.47
Sexton et al 2004	1.1		11.5		97.9 %	5.2
Weisel 2006	ND	3.23	6.74	16.1	41 %	1.7
Median (ug/m³)	1.4	3.7	11.015	16.1	50 %	

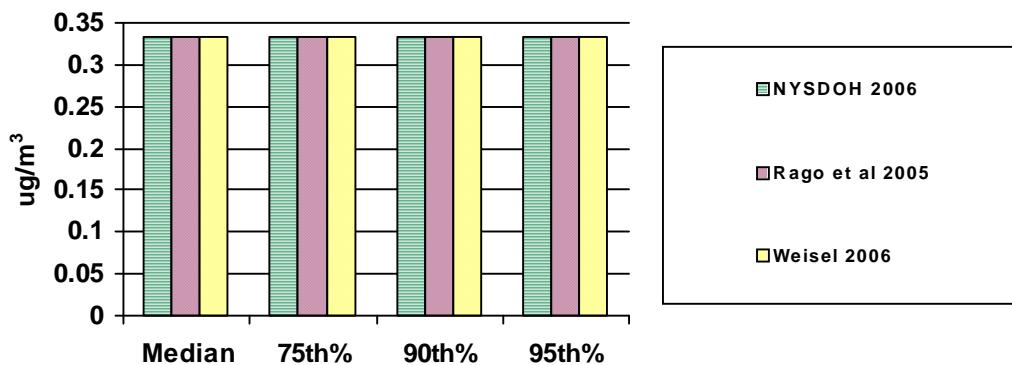
Dichloromethane

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Dichloropropane, 1,2-**

CAS Number: 78-87-5

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	ND	ND	2.2 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	2.31
Weisel 2006	ND	ND	ND	ND	0 %	2.3
	Median (ug/m³)	NR	NR	NR	NR	0 %

Dichloropropane, 1,2-

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air Concentrations

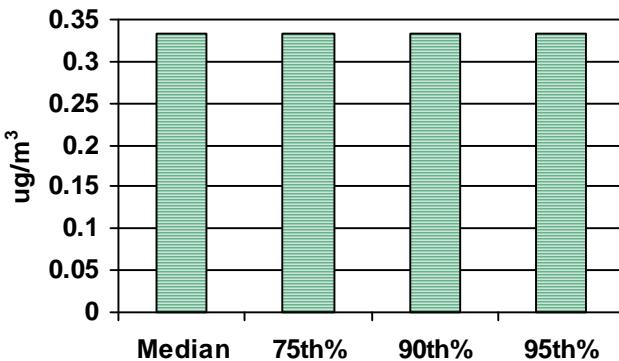
All Concentrations are in ug/m³

Dichloropropene, 1,3-

CAS Number: 542-75-6

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	ND	ND	0 %	0.25
	Median (ug/m³)	NR	NR	NR	NR	0 %

Dichloropropene, 1,3-



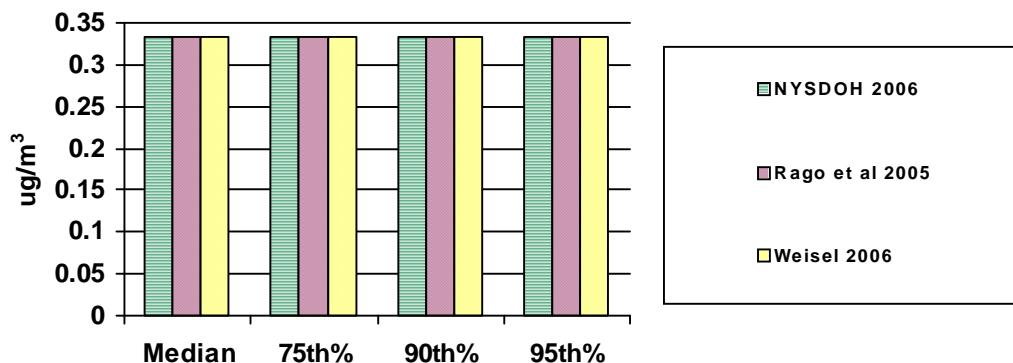
■ NYSDOH 2006

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Dichloropropene, cis-1,3-**

CAS Number: 10061-01-5

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	ND	ND	3 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	2.27
Weisel 2006	ND	ND	ND	ND	0 %	2.3
	Median (ug/m³)	NR	NR	NR	NR	0 %

Dichloropropene, cis-1,3-

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air Concentrations

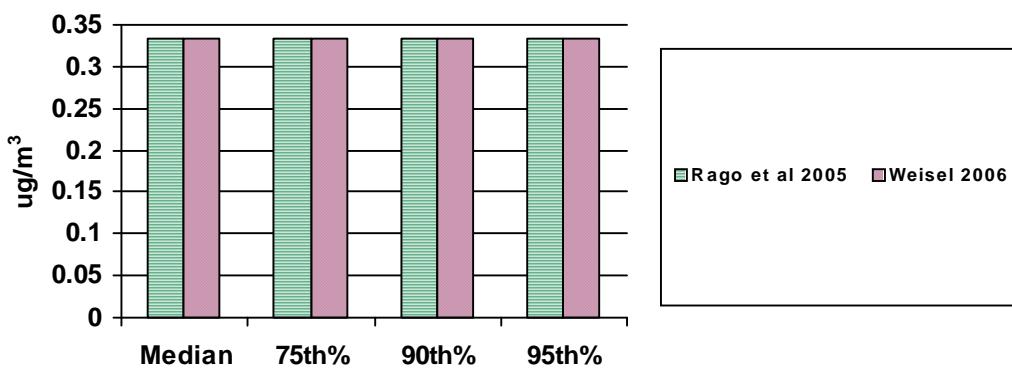
All Concentrations are in ug/m³

Dichloropropene, trans-1,3-

CAS Number: 10061-02-6

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Rago et al 2005	ND	ND	ND	ND	0 %	2.27
Weisel 2006	ND	ND	ND	ND	0 %	2.3
Median (ug/m³)	NR	NR	NR	NR	0 %	

Dichloropropene, trans-1,3-



NOTE: A concentration of 0.333 in the graph indicates a non-detect

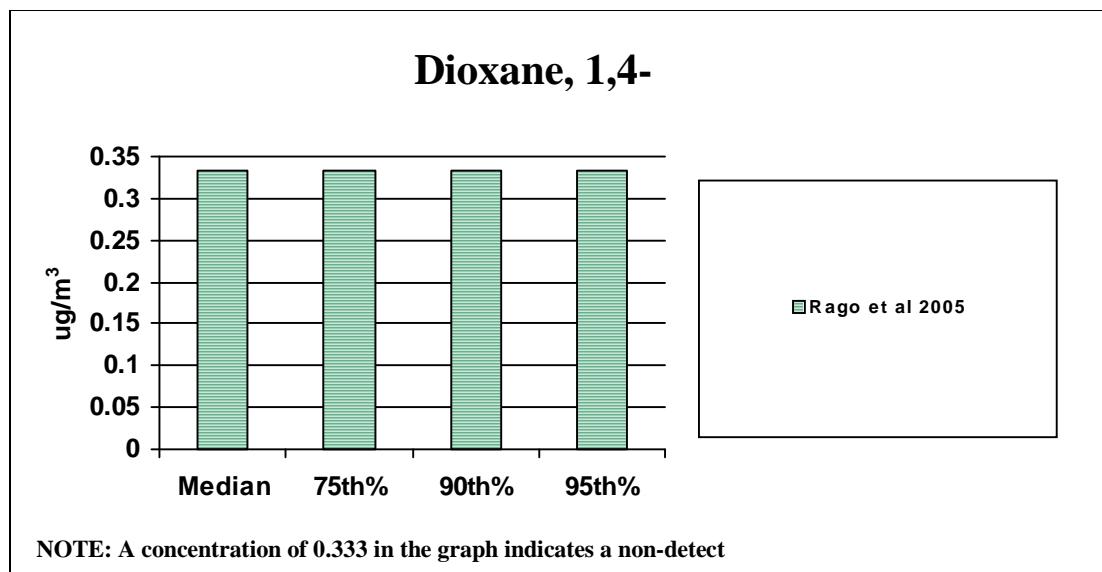
MassDEP Survey of Typical Indoor Air Concentrations

All Concentrations are in ug/m³

Dioxane, 1,4-

CAS Number: 123-91-1

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Rago et al 2005	ND	ND	ND	ND	0 %	3.6
	Median (ug/m³)	NR	NR	NR	NR	0 %



MassDEP Survey of Typical Indoor Air Concentrations

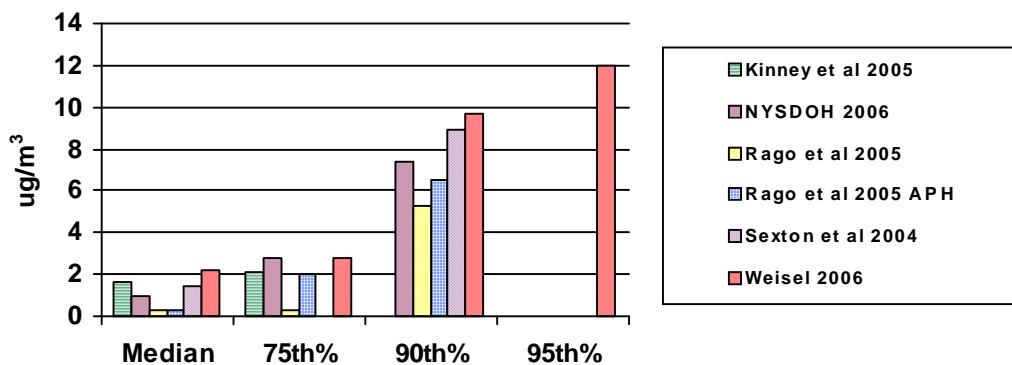
All Concentrations are in ug/m³

Ethylbenzene

CAS Number: 100-41-4

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Kinney et al 2005	1.62	2.14			99 %	0.31
NYSDOH 2006	1	2.8	7.4		85.5 %	0.25
Rago et al 2005	ND	ND	5.25		22 %	2.17
Rago et al 2005 APH	ND	2.02	6.52		26 %	2
Sexton et al 2004	1.4		8.9		99 %	
Weisel 2006	2.2	2.75	9.64	12	56 %	2.2
Median (ug/m³)	1.51	2.445	7.4	12	70.75 %	

Ethylbenzene

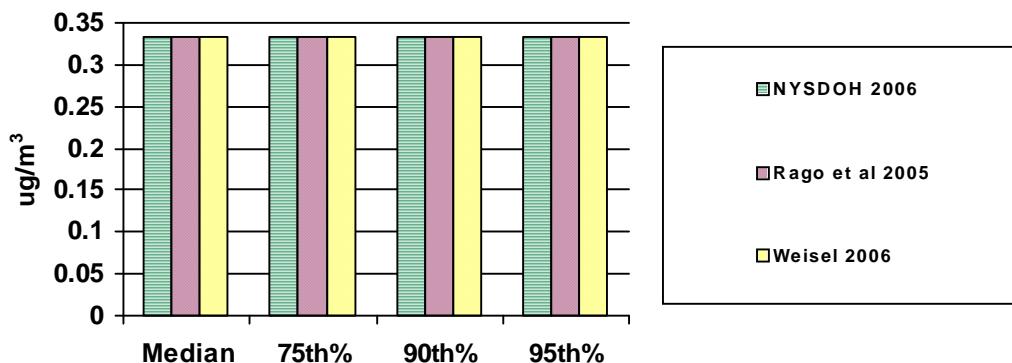


NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Ethylene Dibromide**

CAS Number: 106-93-4

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	ND	ND	0.7 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	3.84
Weisel 2006	ND	ND	ND	ND	0 %	3.8
	Median (ug/m³)	NR	NR	NR	NR	0 %

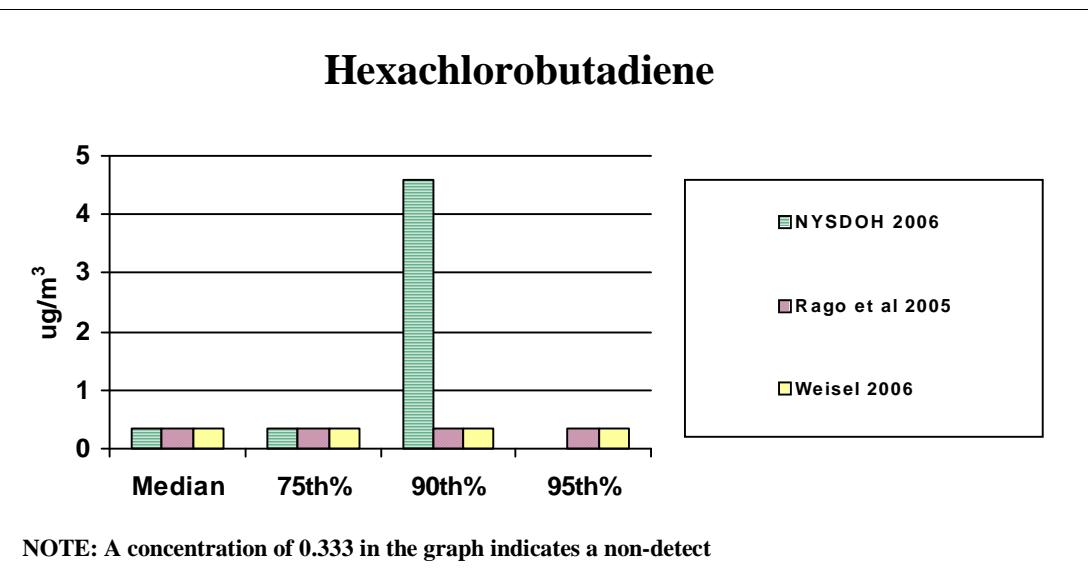
Ethylene Dibromide

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Hexachlorobutadiene**

CAS Number: 87-68-3

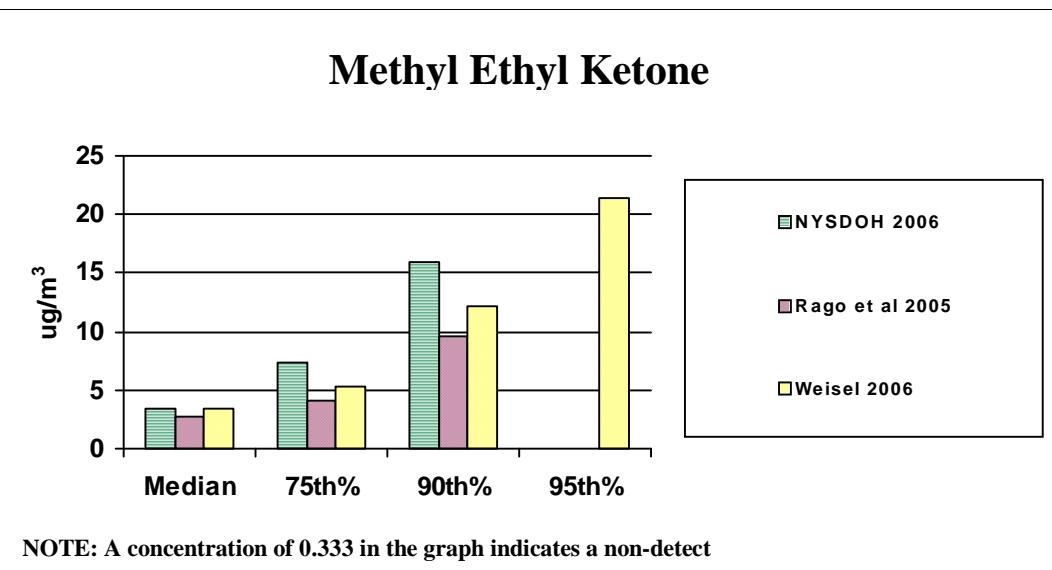
<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	4.6		24 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	5.33
Weisel 2006	ND	ND	ND	ND	0 %	5.3
Median (ug/m³)	NR	NR	4.6	NR	0 %	



MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Methyl Ethyl Ketone**

CAS Number: 78-93-3

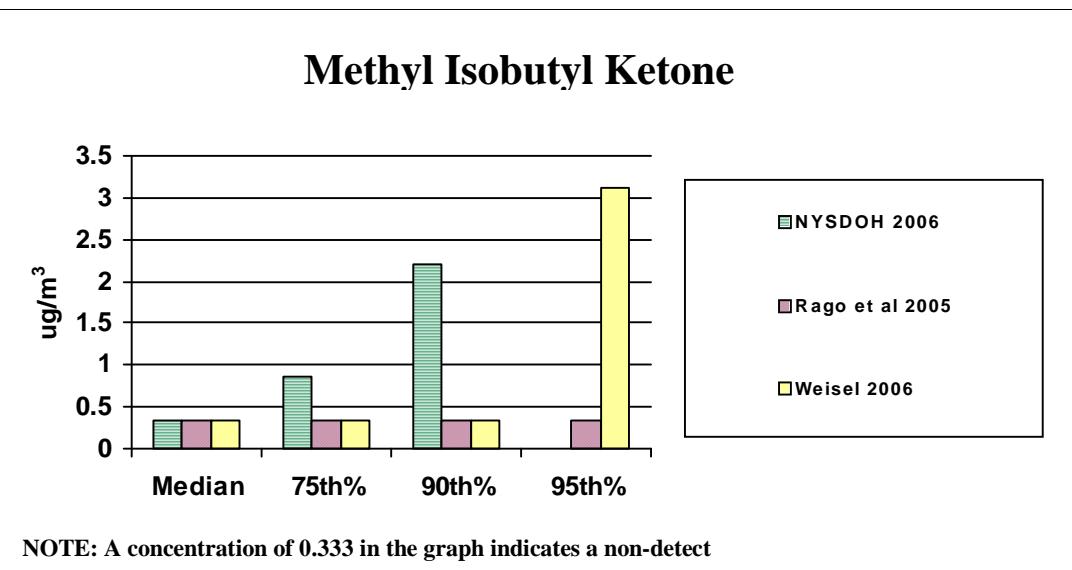
<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	3.4	7.3	16		91.2 %	0.25
Rago et al 2005	2.66	4.03	9.65		79 %	1.47
Weisel 2006	3.5	5.3	12.1	21.4	84 %	1.5
Median (ug/m³)	3.4	5.3	12.1	21.4	84 %	



MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Methyl Isobutyl Ketone**

CAS Number: 108-10-1

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	0.33	0.86	2.2		55.1 %	0.25
Rago et al 2005	ND	ND	ND	ND	4 %	2.05
Weisel 2006	ND	ND	ND	3.12	10 %	2
Median (ug/m³)	0.33	0.86	2.2	3.12	10 %	

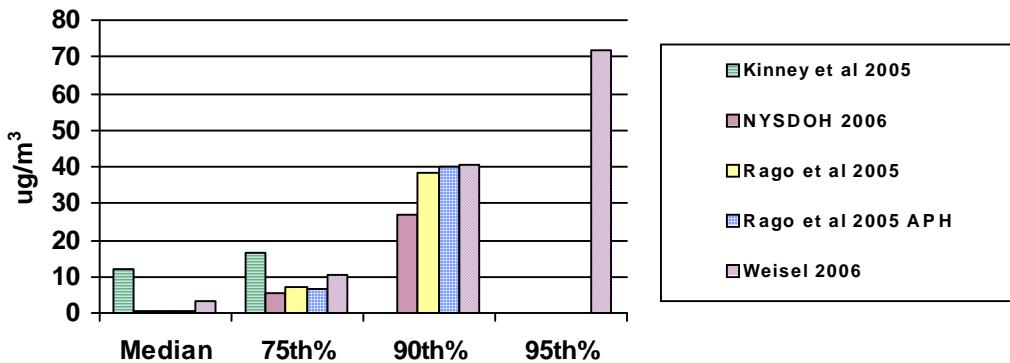


MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Methyl tert butyl ether**

CAS Number: 1634-04-4

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Kinney et al 2005	12.04	16.65			98 %	0.13
NYSDOH 2006	0.79	5.6	27		69.6 %	0.25
Rago et al 2005	ND	6.87	38.31		43 %	1.8
Rago et al 2005 APH	ND	6.42	39.73		46 %	2
Weisel 2006	3.45	10.5	40.7	72	66 %	1.8
Median (ug/m³)	3.45	6.87	39.02	72	66 %	

Methyl tert butyl ether



NOTE: A concentration of 0.333 in the graph indicates a non-detect

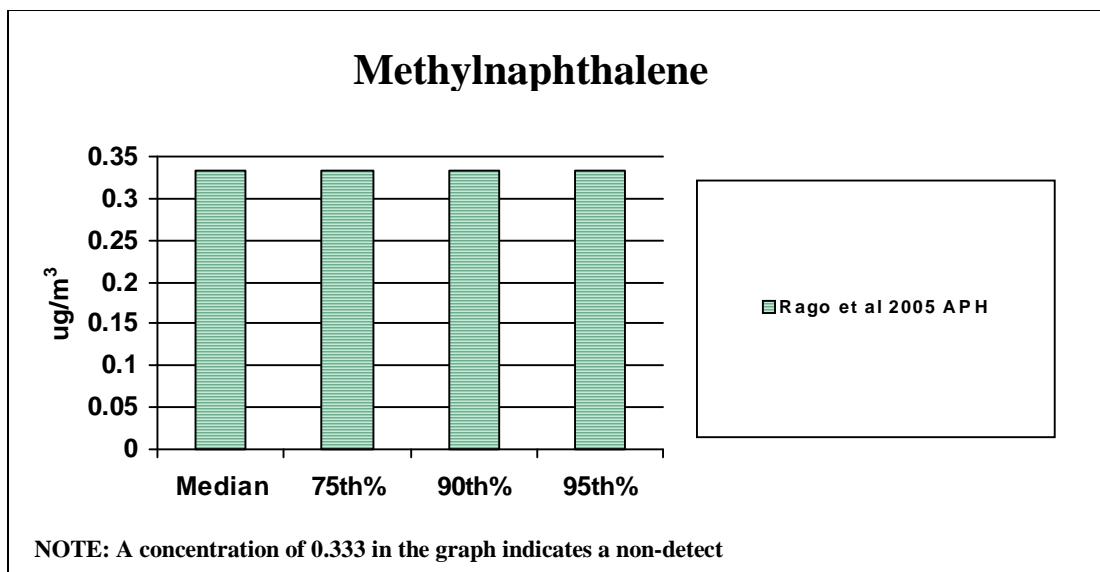
MassDEP Survey of Typical Indoor Air Concentrations

All Concentrations are in ug/m³

Methylnaphthalene

CAS Number: 91-57-6

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Rago et al 2005 APH	ND	ND	ND	ND	1 %	8
	Median (ug/m ³)	NR	NR	NR	NR	1 %



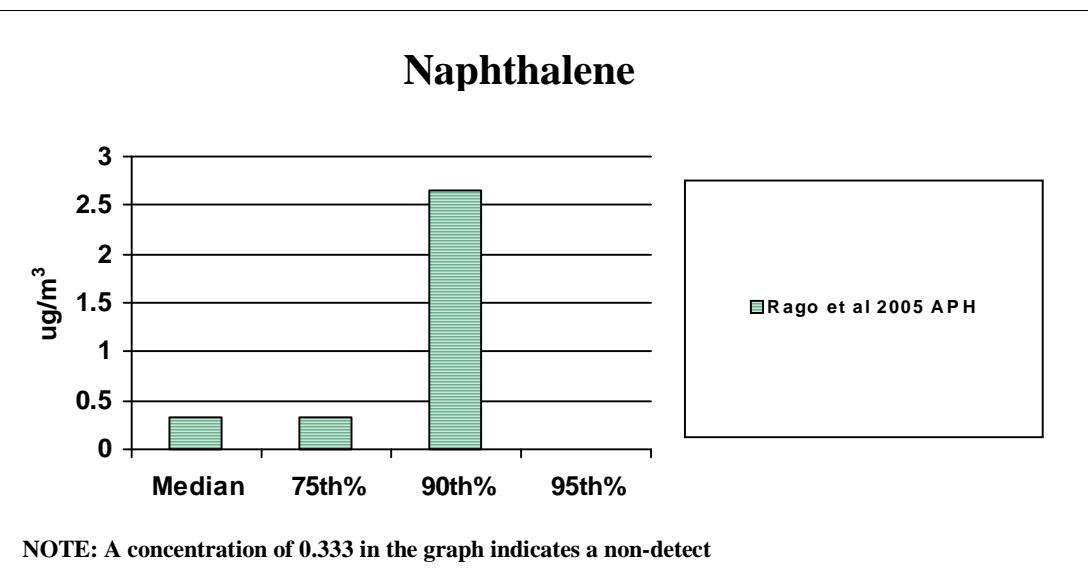
MassDEP Survey of Typical Indoor Air Concentrations

All Concentrations are in ug/m³

Naphthalene

CAS Number: 91-20-3

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Rago et al 2005 APH	ND	ND	2.66		16 %	2
	Median (ug/m³)	NR	NR	2.66	NR	16 %



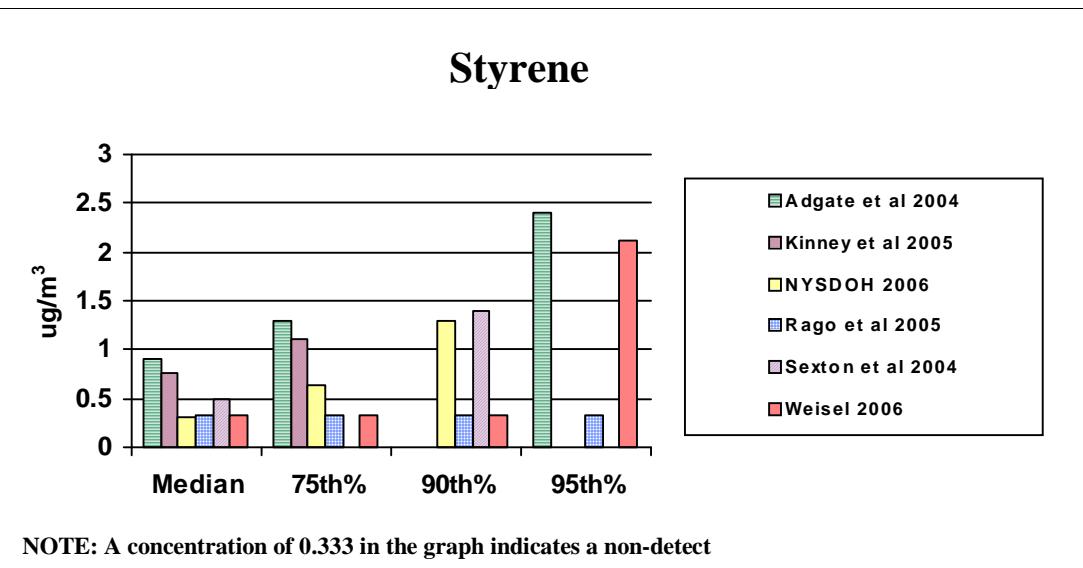
MassDEP Survey of Typical Indoor Air Concentrations

All Concentrations are in ug/m³

Styrene

CAS Number: 100-42-5

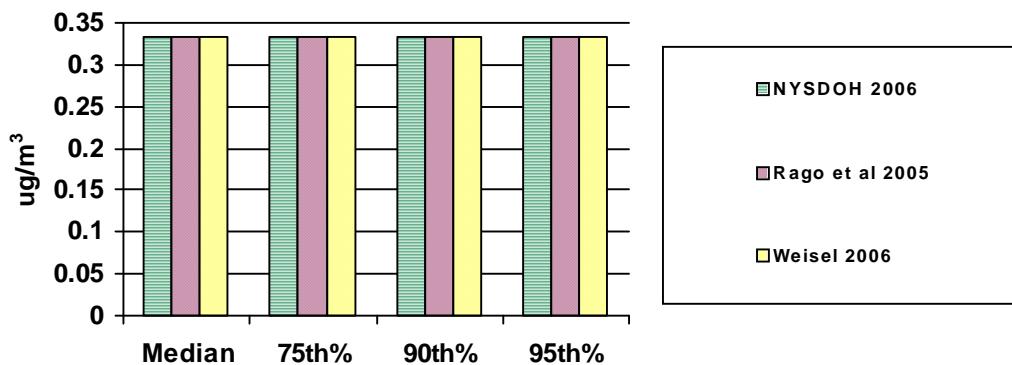
<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Adgate et al 2004	0.9	1.3		2.4	84.9 %	0.6
Kinney et al 2005	0.76	1.1			84 %	0.46
NYSDOH 2006	0.3	0.64	1.3		56.2 %	0.25
Rago et al 2005	ND	ND	ND	ND	1 %	2.13
Sexton et al 2004	0.5		1.4		74.3 %	0.9
Weisel 2006	ND	ND	ND	2.11	19 %	2.1
Median (ug/m³)	0.63	1.1	1.35	2.255	65.25 %	



MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Tetrachloroethane, 1,1,2,2-**

CAS Number: 79-34-5

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	ND	ND	3.5 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	3.43
Weisel 2006	ND	ND	ND	ND	0 %	3.4
	Median (ug/m³)	NR	NR	NR	NR	0 %

Tetrachloroethane, 1,1,2,2-

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air Concentrations

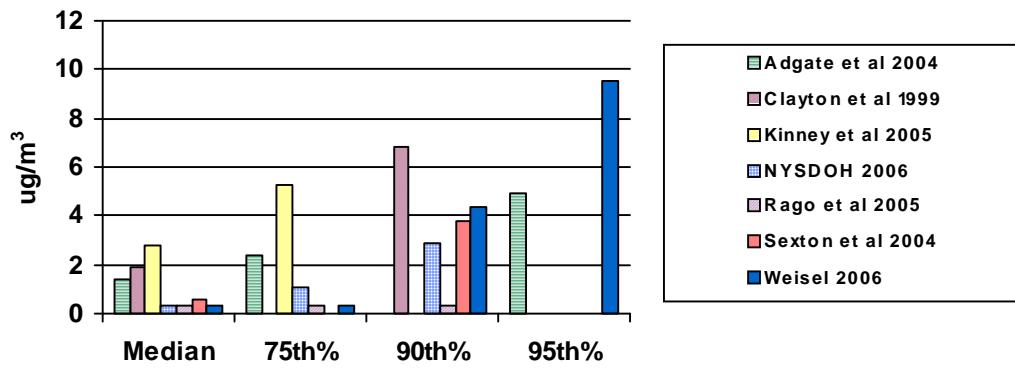
All Concentrations are in ug/m³

Tetrachloroethylene

CAS Number: 127-18-4

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Adgate et al 2004	1.4	2.4		4.9	86.6 %	0.5
Clayton et al 1999	1.89		6.83		57.1 %	
Kinney et al 2005	2.77	5.3			92 %	0.17
NYSDOH 2006	0.34	1.1	2.9		53.2 %	0.25
Rago et al 2005	ND	ND	ND		5 %	3.39
Sexton et al 2004	0.6		3.8		97.6 %	2.1
Weisel 2006	ND	ND	4.39	9.53	23 %	3.4
Median (ug/m³)		1.4	2.4	4.095	7.215	57.1 %

Tetrachloroethylene

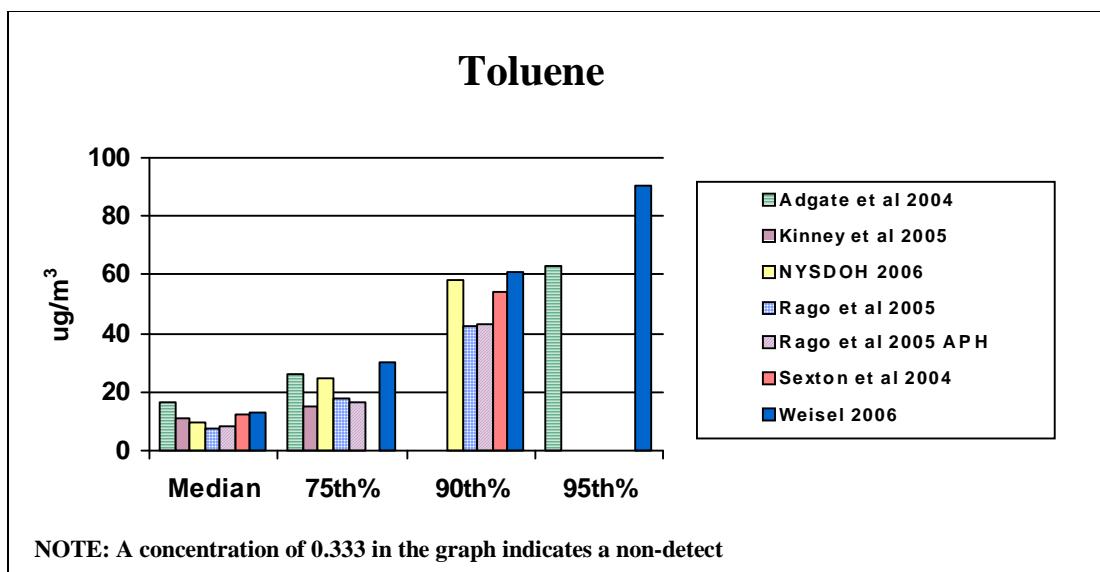


NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Toluene**

CAS Number: 108-88-3

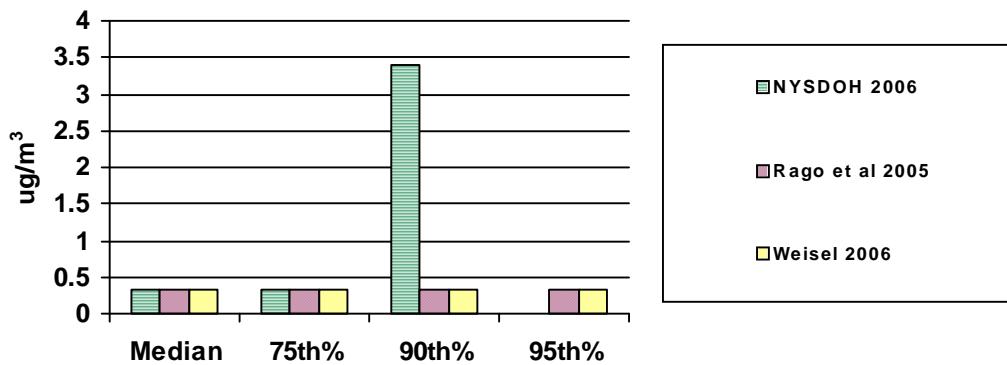
<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Adgate et al 2004	16.2	26.1		63	99.6 %	4.4
Kinney et al 2005	11	14.9			95 %	1.15
NYSDOH 2006	9.6	24.8	58		93.7 %	0.25
Rago et al 2005	7.62	17.93	42.51		90 %	1.88
Rago et al 2005 APH	8.32	16.73	43.24		90 %	2
Sexton et al 2004	12.3		53.8		97.9 %	10.9
Weisel 2006	13	30	60.8	90.2	100 %	1.9

Median (ug/m³) 11 21.365 53.8 76.6 95 %

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Trichlorobenzene, 1,2,4-**

CAS Number: 120-82-1

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	3.4		20.2 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	3.71
Weisel 2006	ND	ND	ND	ND	0 %	3.7
	Median (ug/m³)	NR	NR	3.4	NR	0 %

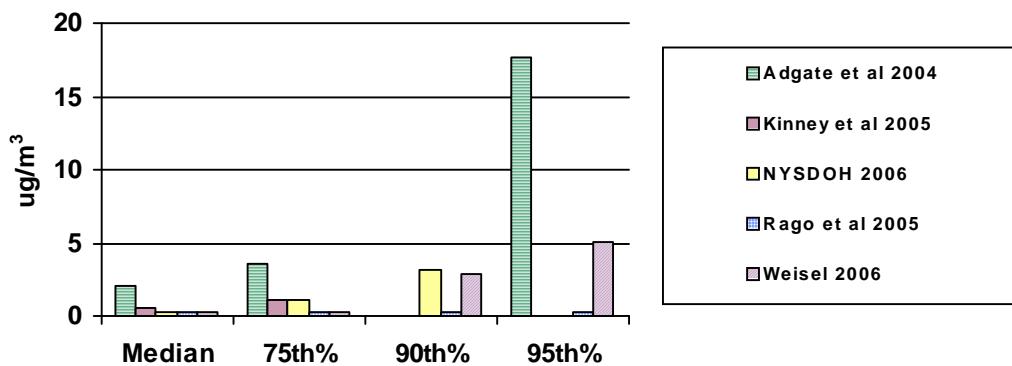
Trichlorobenzene, 1,2,4-

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Trichloroethane, 1,1,1-**

CAS Number: 71-55-6

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Adgate et al 2004	2	3.6		17.7	93 %	0.8
Kinney et al 2005	0.54	1.08			92 %	0.13
NYSDOH 2006	0.33	1.1	3.1		58.5 %	0.25
Rago et al 2005	ND	ND	ND	ND	4 %	2.72
Weisel 2006	ND	ND	2.81	5.11	21 %	2.7
Median (ug/m³)	0.54	1.1	2.955	11.405	58.5 %	

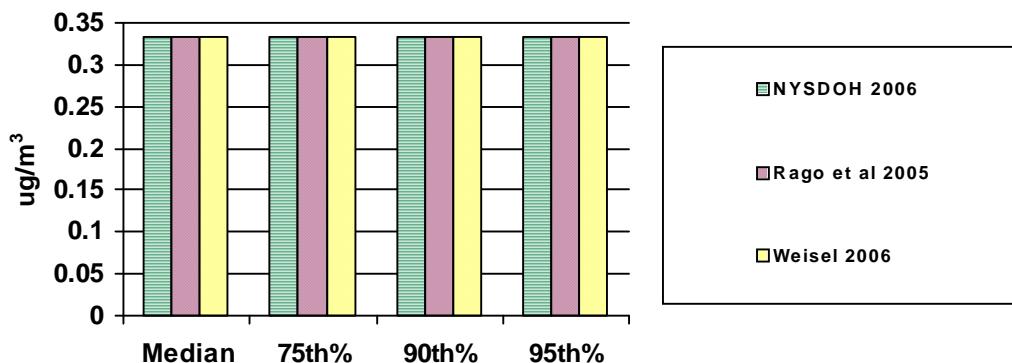
Trichloroethane, 1,1,1-

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Trichloroethane, 1,1,2-**

CAS Number: 79-00-5

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	ND	ND	4 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	2.72
Weisel 2006	ND	ND	ND	ND	0 %	2.7
	Median (ug/m³)	NR	NR	NR	NR	0 %

Trichloroethane, 1,1,2-

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air Concentrations

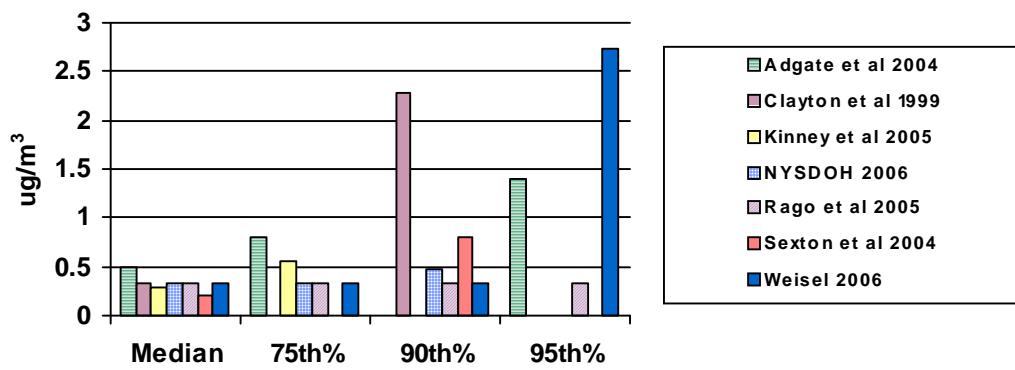
All Concentrations are in ug/m³

Trichloroethylene

CAS Number: 79-01-6

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Adgate et al 2004	0.5	0.8		1.4	94 %	0.2
Clayton et al 1999	ND		2.28		36.1 %	
Kinney et al 2005	0.29	0.55			69 %	0.15
NYSDOH 2006	ND	ND	0.48		19.2 %	0.25
Rago et al 2005	ND	ND	ND	ND	2 %	2.68
Sexton et al 2004	0.2		0.8		83.9 %	
Weisel 2006	ND	ND	ND	2.74	8 %	2.7
Median (ug/m³)	0.29	0.675	0.8	2.07	36.1 %	

Trichloroethylene

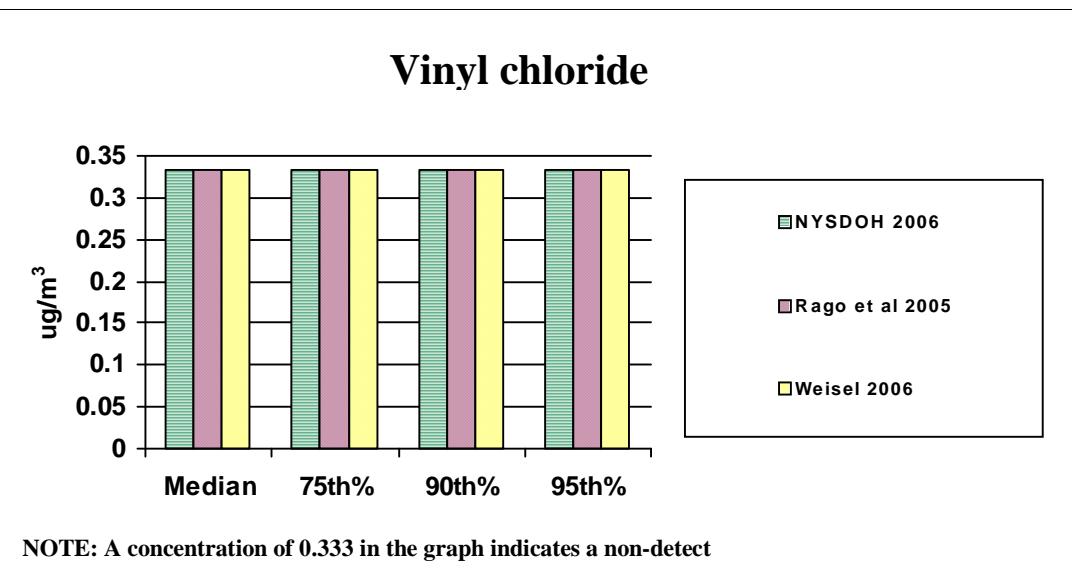


NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Vinyl chloride**

CAS Number: 75-01-4

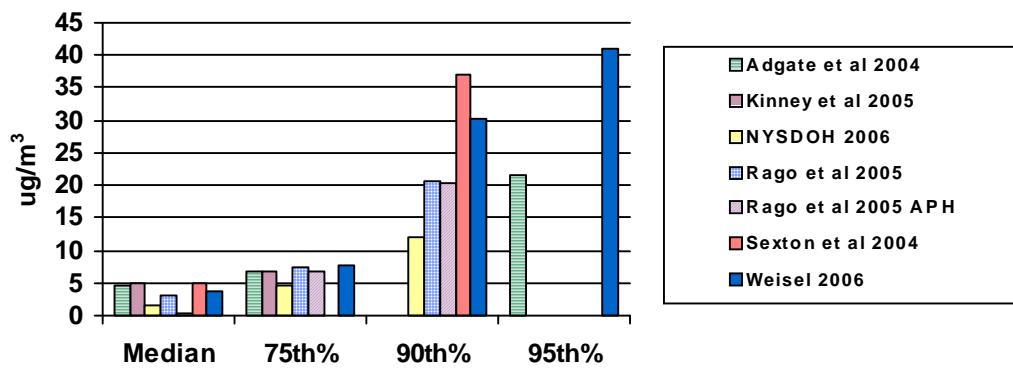
<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
NYSDOH 2006	ND	ND	ND	ND	3.2 %	0.25
Rago et al 2005	ND	ND	ND	ND	0 %	1.28
Weisel 2006	ND	ND	ND	ND	%	1.3
	Median (ug/m³)	NR	NR	NR	NR	1.6 %



MassDEP Survey of Typical Indoor Air ConcentrationsAll Concentrations are in ug/m³**Xylenes (m&p)**

CAS Number: 108-38-3 and

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Adgate et al 2004	4.6	6.9		21.6	100 %	1.5
Kinney et al 2005	5.02	6.64			99 %	0.86
NYSDOH 2006	1.5	4.6	12		86.5 %	0.25
Rago et al 2005	2.99	7.41	20.52		52 %	2.17
Rago et al 2005 APH	ND	6.83	20.49		45 %	4
Sexton et al 2004	4.8		36.9		99.7 %	
Weisel 2006	3.8	7.8	30.2	41.1	83 %	2.2
Median (ug/m³)		4.2	6.865	20.52	31.35	86.5 %

Xylenes (m&p)

NOTE: A concentration of 0.333 in the graph indicates a non-detect

MassDEP Survey of Typical Indoor Air Concentrations

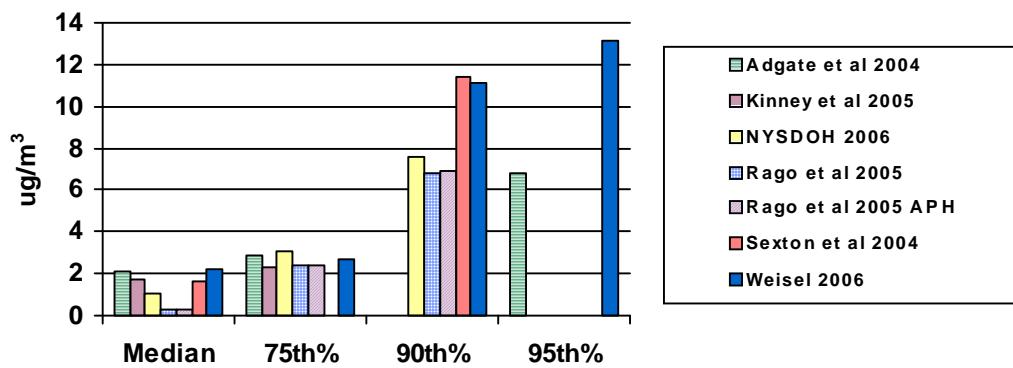
All Concentrations are in ug/m³

Xylenes (o)

CAS Number: 95-47-6

<u>Study</u>	<u>Median</u>	<u>75th%</u>	<u>90th%</u>	<u>95th%</u>	<u>%Detected</u>	<u>Det Limit</u>
Adgate et al 2004	2.1	2.9		6.8	100 %	0.4
Kinney et al 2005	1.71	2.3			99 %	0.37
NYSDOH 2006	1.1	3.1	7.6		82.2 %	0.25
Rago et al 2005	ND	2.42	6.78		29 %	2.17
Rago et al 2005 APH	ND	2.44	6.86		31 %	2
Sexton et al 2004	1.6		11.4		99.7 %	
Weisel 2006	2.2	2.65	11.1	13.1	55 %	2.2
Median (ug/m³)	1.71	2.545	7.6	9.950001	82.2 %	

Xylenes (o)



NOTE: A concentration of 0.333 in the graph indicates a non-detect